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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,900	02/28/2007	Koji Koyanagi	0425-1252PUS1	3404

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EXAMINER

LI, AIQUN

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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10/15/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/574,900	Applicant(s) KOYANAGI ET AL.	
	Examiner AIQUN LI	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-17 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>04/06/2006, 11/06/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 6, 9, 11-17 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 5, 8, 12, 15-17 and 19-22 of U.S. Patent No. 7374699 (hereinafter ‘699). Although the conflicting claims are not identical, they are not patentably distinct from each other because they are both drawn to a slurry modifier composition comprising the same cationic surfactant, anionic aromatic or bromide compound and same water reducing agent. Although the specific compounds of ‘699 are not specifically named in the instant claims, the instant disclosure exemplifies these compounds. See *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. **Claims 1-9 and 11-17** are rejected under 35 U.S.C. 103(a) as being obvious over EP1266875 A2 (Yamamuro) in view of US Patent 4176107 (Buckman).

Yamamuro teaches a slurry rheology modifier comprising compound A and a different compound B, wherein the viscosity of an aqueous solution at 20°C prepared by mixing an aqueous solution S_A (with a viscosity at 20°C of 100 mPa·s or less) of compound A with an aqueous solution S_B (with a viscosity at 20°C of 100 mPa·s or less) of compound B in the ratio of 50/50 by weight can be at least twice as high as the viscosity of either aqueous solution before mixed ([0011]), and wherein compound A is selected from cationic surfactants and compound B is selected from anionic aromatic compounds or brominated compounds ([0031]).

Yamamuro further teaches the slurry modifier is used to prepare hydraulic slurry containing water, a hydraulic powder ([0036]), fillers including calcium carbonate, fly ash and blast furnace slag ([0078]), and the slurry rheology modifier by adding the slurry modifier to the slurry ([0036], [0080] and [0081]), wherein adding one compound A or B then adding the other compound a or B to the slurry is preferred ([0081]), and the slurry may further comprises high-performance water reducing agents or high-performance AE water-reducing agents ([0082]).

Yamamuro still further teaches compound A and compound B of the slurry rheology modifier can be used in combination with other existing thickening agents including polymer based thickening agents ([0084]).

Yamamuro does not explicitly disclose the cationic polymer C in the instant claim.

Buckman teaches polymer thickeners (col.7, line 10-15) that are useful in drilling (col.6, line 30-35) include cationic polymers such as dimethylaminoalkylacrylates and methacrylates and their quaternary derivatives, dimethylaminopropylmethacrylamides and quaternary derivatives, diallyldimethylammonium halides (col.3, line 12-19), which reads on the claimed polymers, and surfactants including the instant cationic surfactants such as hexadecyltrimethylammonium chloride and octadecyltrimethylammonium chloride (col.4, line 55-60), wherein the surfactants are used in amounts of 1 percent to 20 percent based on the water-polymer composition in which the polymer is present in an amount of from 20 percent to 70 percent by weight (col.5, line 32-38), which is equivalent to 100 to 350 part by weight of the polymer per

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100 part by weight of the surfactant, calculated by the examiner based on 20 percent surfactant.

At the time the invention was made it would have been obvious for a person of ordinary skill in the art to include Buckman's cationic polymer thickening agent and the amount in the rheology modifier composition of Yamamuro since it has been held that it is *prima facie* obviousness to use a known material based on its suitability for its intended use. See *Sinclair & Carroll Co v. Interchemical Corp*, 325 US 327, 65 USPQ 297 (1945), *In re Leshin*, 227 F2d 197, 125 USPQ 416 (CCPA 1960) and *Ryco, Inc v. Ag-Bag Corp*, 857 F2d 1418, 8 USPQ2d 1323 (Fed Cir 1988).

Further, regarding claim 7, since Yamamuro and Buckman teaches the same polymer as claimed, the cationic density of the Yamamuro and Buckman polymer would intrinsically be the same as claimed. If there is any difference between the product of Buckman and the product of the instant claims the difference would have been minor and obvious. "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. See MPEP 2112.01(I) , *In re Best*, 562 F2d at 1255, 195 USPQ at 433, *Titanium Metals Corp v Banner*, 778 F2d 775, 227 USPQ 773 (Fed Cir 1985), *In re Ludtke*, 441 F2d 660, 169 USPQ 563 (CCPA 1971) and *Northam Warren Corp v D F Newfield Co*, 7 F Supp 773, 22 USPQ 313 (EDNY 1934).

Still further, specially regarding claims 14 and 17, the recitation “as a pipe jacking additive”, “of pipe jacking” or “for pipe jacking method” has not been given patentable weight because it merely recites the purpose of a process or the intended use of a structure. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Additionally, It is noted that Yamamuro expressly teach the modifier is capable of conferring properties excellent in viscosity and segregation resistance on water-powder slurry comprising powder used as a civil engineering/building material ([0001]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AIQUN LI whose telephone number is (571)270-7736. The examiner can normally be reached on Monday -Thursday, 9:30 am - 6:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571)2721498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AL/

/Timothy J. Kugel/
Primary Examiner, Art Unit 1796